ABSTRACT
        Money has a significant impact on people's
motivation, behavior, and performance. A Money Ethic Scale (MES) was
recently developed, by which the meaning of money was examined in a
sample of 249 full-time employees in the United States. Six major
factors (30 items) were identified using the MES scale: good, evil,
achievement, respect, budget, and power. In the present study it was
purposed to develop a short measure of the Money Ethic Scale. The two
items with the highest item-total correlations were selected for each
factor. Thus, 12 items were selected for the short MES scale. The
correlations between the long MES and the short MES scales were
examined using a sample of 688 subjects, including the original 249
subjects. It appears that the original factors: good, achievement,
respect, and freedom/power were all combined into one major factor,
success. Three factors were identified using the 12-item scale:
success, budget, and evil. It is interesting to note that positive
attitudes toward money and negative attitudes toward money are not on
the same dimension or the same factor. People's positive attitudes
toward money and negative attitudes toward money are two separate
factors. Thus, the opposite of the notion that "money represents
success" is not "money is evil." Future research should use this
scale to examine people's attitudes toward money as related to their
behavior, performance, and effectiveness in organizations.
(Author/LLL)

The Development of A Short Measure of the Money Ethic Scale

Thomas Li-Ping Tang

Department of Management and Marketing

Middle Tennessee State University

Running head: MONEY ETHIC

Abstract

Recently, the Money Ethic Scale (MES) was developed based on a sample of 249 full-time employees in the United States (Tang, in press). Six factors (30 items) were identified using the MES scale: Good, Evil, Achievement, Respect, Budget, and Power. In the present study, the two items with the highest item-total correlations based on the original study were selected for each factor. Thus, 12 items were selected for the short MES scale. The correlations between the long MES and the short MES scales were examined using a sample of 688 subjects, including the original 249 subjects. Three factors were identified using the 12-item scale: Success, Budget, and Evil.

The Development of A Short Measure of the Money Ethic Scale

Money has significant impacts on people's motivation, behavior, and performance (Lawler, 1981; Opsahl & Dunnette, 1966; Whyte, 1955). McClelland (1967) stated, the meaning of money is "in the eye of the beholder" (p. 10). To some people, money is a motivator (cf. Lawler, 1981), to others, money is a hygiene factor (cf. Herzberg, Mausner, & Snyderman, 1959). Recently, there is a renewed interests in the meaning of money in the literature (cf. Furnham, 1984; Tang, 1988, 1990, 1991, in press; Tang & Gilbert, 1992; Yamauchi & Templer, 1982).

Tang (in press) developed a Money Ethic Scale (MES) and examined the meaning of money in a sample of full-time employees in the United States. Six major factors (30 items) were identified and were categorized into three components: the affective component (i.e., money is Good and Evil), the cognitive component (i.e., money represents Achievement, Respect, and Freedom/Power), and finally the behavioral component (I Budget my money carefully). These factors are discussed briefly as follows:

Factor Good covers the positive attitudes toward money, e.g., "money is important" and "valuable". Factor Evil deals with the negative attitudes toward money, e.g., "money is the root of all evil" and "money is evil". Factor three deals with the notion that money represents Achievement, e.g., "money represents one's achievement" and "money is a symbol of success". Money also represents Respect. Sample questions such as "money makes people respect you in the community" and "money will help you express your competence and abilities" comprise this Factor. "I use my money

4

very carefully" and "I budget my money very well" signify the important behavioral component of the MES measure: one's ability to Budget one's money. Finally, money represents Freedom and Power, e.g., "money gives you autonomy and freedom" and "money can give you the opportunity to be what you want to be".

This scale has been used in several recent studies and has provided some interesting results concerning people's attitudes toward money as related to demographic variables, other personality variables, and organizational variables (e.g., Tang, 1991, in press; Tang & Gilbert, 1992). One practical concern related to the use of the Money Ethic Scale (MES) is its length. The MES scale has 30 items. The major purpose of the present study was to develop a short measure of the Money Ethic Scale.

<div align="center">Method</div>

Procedure

Tang's (in press) original MES scale was developed using a sample of 249 full-time employees in the United States. Based on the results of a factor analysis, a total of 30 items and six Factors were identified: Good (9 items), Evil (6 items), Achievement (4 items), Respect (4 items), Budget (3 items), and Freedom/power (4 items).

In the present study, the two items with the highest item-total correlations were selected for each factor. Thus, 12 items were selected for the short MES scale (see Table 2).

Subjects

Data were collected from a sample of 249 full-time employees, 169 part-time employees, and 270 subjects who were not working.

<div align="center">5</div>

Data from 249 full-time employees were analyzed and reported

elsewhere (Tang, in press). The majority of the other subjects (439

subjects) were students of a state university with more than 15,000

students located in the southeastern United States. Data from the

whole sample ($\underline{N}$ = 688) were analyzed in the present study.

Results and Discussion

Table 1 shows the mean score, standard deviation, and

correlations for each Factor of the long and short Money Ethic Scale

(MES). The mean score was calculated based on the sum of all items

of the Factor divided by the number of items. Therefore, the mean

score was expressed as an average score on a 7-point scale. The

total score of the short MES scale, Money, was calculated by adding

all 12 items with Factor Evil reverse scored. The correlations

between Money and the Factors of the long and short MES scales are

also presented in Table 1.

Insert Table 1 and 2 about here

Table 1 also shows the correlations between the Factors of the

long and short MES and the reliability coefficient (Cronbach's

alpha) for each factor of the short MES scale. A close examination

of Table 1 reveals the significant correlations between the long and

short measures on Factors Good (.83), Evil (.84), Achievement (.85),

Respect (.88), Budget (.91), and Freedom/Power (.89).

The strength of the correlation between the long and short MES

scales is also a reflection of the number of items in the original

long MES scale. For example, for Factor Good, the long MES has 9

items, whereas for Factor Budget, it has only 3 items. Only two items were selected for each factor of the short MES scale. Thus, the correlation between the long and short MES scale of the former will be weaker than the latter. These results suggest that the short MES scale is significantly related to the long MES scale.

Data based on this 12-item scale from 688 subjects were subjected to a principal components factor analysis. Using a criterion of eigenvalues greater than one and a factor loading of .45 or higher on one factor, followed by the varimax rotation, three Factors (12 items, 53.0% of the variance) were identified: Success, Budget, and Evil (see Table 2).

It appears that the original Factors Good, Achievement, Respect, and Freedom/Power were all combined into one major Factor-- Success. Among these four Factors, only Factor Good is an affective component of people's attitudes toward money, whereas the other three Factors are all cognitive components of the attitudes. It should be pointed out that there is a common theme across all these four Factors: Money is a symbol of success and all other positive notions related to it.

Success can be considered mainly as the cognitive component of people's attitude toward money. However, Budget (the behavioral component) and Evil (affective component) were maintained as separate Factors.

It is interesting to note that positive attitudes toward money and negative attitudes toward money are not on the same dimension or the same factor. In the job satisfaction literature, Herzberg et al. (1959) pointed out that the opposite of job satisfaction is not

job dissatisfaction. Therefore, people's attitudes toward money are similar to their attitudes toward their job in that people's positive attitudes toward money and negative attitudes toward money are two separate factors. Thus, the opposite of the notion that "money represents Success" is not "money is Evil". Further, how people Budget their money is separated from the other two factors.

In summary, the Money Ethic Scale has 12 items and these items can be categorized into three major Factors: Success, Budget, and Evil. With Factor Evil reverse scored, a total score of people's attitudes toward money can be calculated. Future research should use this Money Ethic Scale (MES) and examine people's attitudes toward money as related to their behavior, performance, and effectiveness in an organization. The results of these studies will enhance our understanding of attitudes and human behavior.

References

Furnham, A. (1984). Many sides of the coin: The psychology of
money usage. Personality and Individual Difference. 5 (5),
501-509.

Herzberg, F., Mausner, B., & Snyderman, B. (1959). The motivation
to work. New York: John Wiley & Sons.

Lawler, E. E. (1981). Pay and organization development. Reading,
MA: Addison-Wesley Publishing Co.

McClelland, D. C. (1967). Money as a motivator: Some research
insights. The McKinsey Quarterly, 10-21.

Opsahl, R. L., & Dunnette, M. D. (1966). The role of financial
compensation in industrial motivation. Psychological
Bulletin, 66 (2), 94-118.

Tang, T. L. P. (1989). The meaning of money revisited: The
development of the Money Ethic Scale. Paper presented at the
34th Annual Convention of the Southwestern Psychological
Association, Tulsa, OK, April, 1988. (ERIC Document
Reproduction Service ED 306 494).

Tang, T. L. P. (1990). Attitudes towards money: Workers' view.
Paper presented at the 36th Annual Convention of the
Southwestern Psychological Association, Dallas, TX, April,
1990. (ERIC Document Reproduction Service ED 318 984).

Tang, T. L. P. (1991, August). The meaning of money: Extension and
exploration of the Money Ethic Scale in a sample of University
students in Taiwan. Paper presented at the Annual Convention
of the America Chinese Management Educators Association,
Gatlinburg, TN.

Tang, T. L. P. (in press). The meaning of money revisited. _Journal of Organizational Behavior_.

Tang, T. L. P., & Gilbert, P. R. (1992). _Attitudes toward money among mental health workers: Extension and exploration of the Money Ethic Scale_. Paper submitted for publication.

Whyte, W. F. (1955). _Money and motivation: An analysis of incentives in industry_. New York: Harper & Row, Publishers.

Yamauchi, K. T., & Templer, D. I. (1982). The development of a money attitude scale. _Journal of Personality Assessment, 46_ (5), 522- 528.

Table 1
Mean, standard deviation, and correlations of the Long and Short
Money Ethic Scale (MES)

Variable	M	S.D.	Money	2	3	4	5	6
The Long 30-Item Money Ethic Scale								
1. Good	5.66	.73	65***	-29***	36***	37***	20***	49***
2. Evil	2.89	.87	-31***		03	05	02	-04
3. A h.	3.29	1.14	61***			48***	-03	52***
4. Respect	3.76	1.11	64***				02	54***
5. Budget	5.05	1.21	36***					08*
6. Freedom	4.92	1.07	73***					
The Short 12-Item Money Ethic Scale								
1. Good	5.20	1.05	69***	-16***	39***	36***	17***	41***
2. Evil	2.69	1.37	-37***		-01	-02	02	-08*
3. Ach.	4.28	1.38	64***			37***	02	37***
4. Respect	3.92	1.33	65***				03	42***
5. Budget	4.77	1.38	39***					08*
6. Freedom	4.70	1.29	69***					

Correlations Between the Short and Long Money Ethic Scale

Short MES	Reliability	Long MES 1	2	3	4	5	6
1. Good	56	83***	-22***	43***	39***	19***	48***
2. Evil	66	-22***	84***	02	-01	01	-06
3. Ach.	67	38***	-01	85***	41***	02	50***
4. Respect	54	32***	03	42***	88***	02	49***
5. Budget	83	17***	04	-00	05	91***	09**
6. Freedom	51	39***	-07*	42***	45***	07*	89**

Note. N = 688. All decimals have been omitted for correlations.
The total score of the Short MES (with Evil reverse scored) is
labeled as Money (M = 56.36, SD = 8.80). *p < .05; **p < .01;
***p < .001.

Table 2

Factor Loadings for the Short Money Ethic Scale

Item	Loading
Factor 1: Success	(25.9%)
8. Money is a symbol of success	.70
25. Money will help you express your competence and abilities	.63
46. I value money very highly	.62
5. Money represents one's achievement	.61
29. Money can give you the opportunity to be what you want to be	.60
11. Money gives you autonomy and freedom	.60
20. Money makes people respect you in the community	.60
17. Money is important	.53
Factor 2: Budget	(14.3%)
48. I budget my money very well	.92
47. I use my money very carefully	.92
Factor 3: Evil	(12.8%)
15. Money is the root of all evil	.84
4. Money is evil	.84

Note. N = 688. The amount of variance explained by the
factor is presented in parentheses. Items from the original
Factors are listed as follow: Good: 17, 46; Evil: 15, 4;
Achievement: 5, 8; Respect: 20, 25; Budget: 47, 48; and
Freedom/Power: 11, 29.